

APPENDIX C

Modelling Approach and Results



WELLINGTON
COUNTY

Road Master Action Plan



Road #	Station #	Classification	# of Existing Lanes	Total Capacity	Existing AADT	2041 Total AADT	2041 Total PM Peak Hour (Peak Direction)	Existing v/c	2041 v/c
1	101	Rural	2	900	2,628	2,850	220	0.22	0.24
2	201	Rural	2	900	1,830	2,113	160	0.16	0.18
	202	Rural	2	900	932	1,140	90	0.08	0.10
	203	Rural	2	900	769	834	60	0.07	0.07
	204	Urban	2	700	899	975	50	0.07	0.07
3	301	Rural	2	900	902	978	80	0.08	0.09
	302	Rural	2	900	1,157	1,255	100	0.10	0.11
4	401	Rural	2	900	1,316	1,427	110	0.11	0.12
	402	Rural	2	900	1,290	1,399	110	0.11	0.12
5	501	Rural	2	900	2,144	3,376	260	0.19	0.29
	502	Rural	2	900	1,971	3,190	240	0.17	0.27
	503	Urban	2	700	3,064	4,374	240	0.24	0.34
	504	Urban	2	700	2,684	2,910	160	0.21	0.23
	505	Urban	2	700	1,978	2,144	120	0.16	0.17
6	601	Rural	2	900	2,804	3,341	250	0.24	0.28
	602	Rural	2	900	2,612	3,133	240	0.22	0.27
	603	Rural	2	900	2,632	3,155	240	0.22	0.27
	604	Rural	2	900	2,180	2,364	180	0.19	0.20
	605	Rural	2	900	2,095	2,272	170	0.18	0.19
7	701	Rural	2	900	9,262	17,562	1,350	0.79	1.50
	702	Rural	2	900	9,492	17,860	1,370	0.81	1.52
	703	Rural	2	900	11,222	19,737	1,520	0.96	1.69
	704	Rural	2	900	6,360	9,529	730	0.54	0.81
	705	Rural	2	900	4,195	4,549	350	0.36	0.39
	706	Rural	2	900	5,230	5,671	440	0.44	0.49
	707	Rural	2	900	4,658	5,621	430	0.40	0.48
	708	Rural	2	900	4,494	5,443	420	0.39	0.47
	709	Rural	2	900	9,199	12,607	970	0.79	1.08
	710	Rural	2	900	6,631	14,709	1,130	0.57	1.26
8	801	Rural	2	900	10,584	11,476	880	0.90	0.98
	802	Rural	2	900	4,033	4,373	340	0.34	0.38
	803	Rural	2	900	4,100	4,445	340	0.36	0.38
	804	Rural	2	900	3,144	4,369	330	0.27	0.37
	805	Rural	2	900	2,744	3,172	250	0.23	0.28
	806	Urban	2	700	2,413	2,617	140	0.19	0.20
	807	Rural	2	900	4,329	5,654	430	0.37	0.48
	808	Urban	2	700	2,523	2,736	150	0.20	0.21
9	901	Rural	2	900	3,041	3,297	250	0.26	0.28
	902	Rural	2	900	2,631	2,853	220	0.22	0.24
	903	Rural	2	900	2,349	2,547	200	0.20	0.22
	904	Rural	2	900	1,864	2,022	160	0.16	0.18
10	1001	Rural	2	900	2,127	2,307	180	0.18	0.20
	1002	Rural	2	900	2,360	2,559	200	0.20	0.22
	1003	Rural	2	900	1,535	1,665	130	0.13	0.14
	1004	Rural	2	900	1,281	1,389	110	0.11	0.12
	1005	Rural	2	900	1,010	1,095	80	0.09	0.09
	1006	Rural	2	900	585	634	50	0.06	0.06
11	1101	Rural	2	900	663	719	60	0.06	0.07
	1102	Rural	2	900	614	665	50	0.06	0.06
	1103	Rural	2	900	1,190	1,290	100	0.10	0.11
	1104	Rural	2	900	2,215	2,972	220	0.19	0.24
	1105	Rural	2	900	743	806	60	0.07	0.07
	1106	Rural	2	900	1,575	1,707	130	0.13	0.14
	1107	Rural	2	900	1,805	1,957	150	0.16	0.17
	1108	Rural	2	900	1,886	2,045	160	0.17	0.18
12	1201	Rural	2	900	894	969	70	0.08	0.08
	1202	Rural	2	900	3,643	3,950	300	0.31	0.33
	1203	Rural	2	900	3,563	3,863	300	0.30	0.33
	1204	Rural	2	900	3,669	3,978	310	0.31	0.34
	1205	Rural	2	900	3,057	3,315	260	0.27	0.29
	1206	Urban	2	700	825	894	50	0.07	0.07
14	1401	Rural	2	900	1,858	2,015	160	0.16	0.18
	1402	Rural	2	900	2,127	2,306	180	0.18	0.20
	1403	Rural	2	900	1,627	1,764	140	0.14	0.16
	1404	Urban	2	700	2,253	2,443	130	0.17	0.19
15	1501	Urban	2	700	2,784	3,895	220	0.21	0.31
15	1501	Rural	2	900	105	114	10	0.01	0.01
16	1601	Rural	2	900	1,888	2,136	170	0.17	0.19
	1602	Rural	2	900	1,377	1,493	110	0.12	0.12
	1603	Rural	2	900	1,793	1,944	150	0.16	0.17
	1604	Rural	2	900	1,402	1,521	120	0.12	0.13
17	1701	Rural	2	900	5,076	5,504	420	0.43	0.47
	1702	Rural	2	900	4,305	4,668	360	0.37	0.40
	1703	Rural	2	900	4,368	5,076	390	0.38	0.43
	1704	Rural	2	900	4,620	5,009	390	0.40	0.43

Road #	Station #	Classification	# of Existing Lanes	Total Capacity	Existing AADT	2041 Total AADT	2041 Total PM Peak Hour (Peak Direction)	Existing v/c	2041 v/c
18	1801	Rural	2	900	8,449	21,157	1,630	0.72	1.81
	1802	Rural	2	900	8,449	9,161	710	0.72	0.79
	1803	Rural	2	900	9,117	11,124	860	0.78	0.96
	1804	Rural	2	900	7,398	9,243	710	0.63	0.79
	1805	Rural	2	900	5,689	6,756	530	0.49	0.59
	1806	Rural	2	900	10,299	12,506	960	0.88	1.07
	1807	Urban	2	700	3,339	3,620	200	0.26	0.29
	1808	Urban	2	700	9,888	10,721	590	0.77	0.84
	1809	Urban	2	700	11,082	15,150	830	0.87	1.19
	1810	Urban	2	700	6,296	6,827	380	0.50	0.54
	1811	Urban	2	700	9,437	10,232	560	0.74	0.80
	1812	Urban	2	700	6,126	6,642	370	0.49	0.53
	1813	Urban	2	700	8,709	21,439	1,180	0.69	1.69
	1814	Urban	2	700	6,771	7,342	400	0.53	0.57
	1815	Urban	2	700	5,981	6,485	360	0.47	0.51
	1816	Urban	2	700	2,515	2,727	150	0.20	0.21
	1817	Urban	2	700	3,335	3,616	200	0.26	0.29
19	1901	Rural	2	900	5,547	6,771	520	0.48	0.58
	1902	Rural	2	900	3,371	4,411	340	0.29	0.38
	1903	Rural	2	900	1,364	1,479	110	0.12	0.12
	1904	Urban	2	700	3,828	5,153	290	0.30	0.41
	1905	Urban	2	700	4,813	5,812	320	0.37	0.46
21	2101	Rural	2	900	4,393	11,181	860	0.38	0.96
	2102	Rural	2	900	3,973	10,274	790	0.34	0.88
	2103	Rural	2	900	4,741	11,106	860	0.41	0.96
	2104	Rural	2	900	5,802	6,291	480	0.50	0.53
	2105	Urban	2	700	9,079	9,845	540	0.71	0.77
22	2201	Rural	2	900	2,610	2,879	220	0.22	0.24
	2202	Rural	2	900	2,250	2,657	210	0.19	0.23
	2203	Rural	2	900	1,800	2,051	160	0.16	0.18
	2204	Rural	2	900	2,338	3,076	240	0.20	0.27
	2205	Rural	2	900	3,302	3,874	300	0.28	0.33
	2206	Rural	2	900	4,077	4,559	350	0.34	0.39
	2207	Rural	2	900	2,393	2,595	200	0.20	0.22
	2208	Rural	2	900	1,865	2,239	180	0.16	0.20
23	2301	Rural	2	900	2,038	2,348	180	0.18	0.20
	2302	Urban	2	700	3,755	4,209	230	0.30	0.33
24	2401	Rural	2	900	6,775	7,448	580	0.58	0.64
	2402	Rural	2	900	7,076	7,956	610	0.60	0.68
	2403	Rural	2	900	5,587	6,183	480	0.48	0.53
	2404	Rural	2	900	8,388	9,096	700	0.72	0.78
25	2502	Rural	2	900	2,866	3,108	240	0.24	0.27
	2503	Rural	2	900	2,282	2,474	190	0.20	0.21
	2504	Rural	2	900	2,458	2,665	210	0.21	0.23
26	2601	Rural	2	900	8,388	9,314	720	0.72	0.80
	2602	Rural	2	900	3,180	3,455	270	0.27	0.30
	2603	Rural	2	900	3,384	3,676	280	0.29	0.31
	2604	Rural	2	900	2,524	2,826	220	0.21	0.24
	2605	Rural	2	900	1,953	2,976	230	0.17	0.26
27	2701	Rural	2	900	2,819	4,709	370	0.24	0.41
	2702	Rural	2	900	3,992	5,864	450	0.34	0.50
29	2901	Rural	2	900	5,429	5,887	450	0.47	0.50
	2902	Rural	2	900	4,634	5,172	400	0.40	0.44
	2903	Rural	2	900	4,402	6,981	540	0.38	0.60
	2904	Rural	2	900	4,427	6,980	540	0.38	0.60
	2905	Rural	2	900	3,950	6,681	510	0.33	0.57
	2906	Rural	2	900	5,117	5,548	430	0.43	0.48
	2907	Rural	2	900	5,630	6,105	470	0.48	0.52
30	3001	Rural	2	900	4,754	5,155	400	0.41	0.44
	3002	Rural	2	900	6,134	6,651	510	0.52	0.57
	3003	Rural	2	900	4,051	4,392	340	0.34	0.38
	3004	Rural	2	900	3,247	3,521	270	0.28	0.30
31	3101	Rural	2	900	4,333	4,698	360	0.37	0.40
32	3201	Rural	2	900	6,093	6,607	510	0.52	0.57
	3202	Rural	2	900	6,546	7,098	550	0.56	0.61
	3203	Rural	2	900	10,649	11,547	890	0.91	0.99
	3204	Rural	2	900	13,789	14,951	1,150	1.18	1.28
	3205	Rural	2	900	6,541	7,092	550	0.56	0.61
	3206	Rural	2	900	11,413	12,375	950	0.98	1.06
33	3301	Rural Highway	2	1200	11,924	12,930	1,000	0.77	0.83
	3302	Rural Highway	2	1200	9,790	10,616	820	0.63	0.68
	3303	Rural Highway	4	2400	24,924	27,026	2,080	0.80	0.87
34	3401	Rural	2	900	5,558	6,027	460	0.48	0.51
	3402	Rural	2	900	5,606	6,079	470	0.48	0.52
	3403	Rural	2	900	5,424	5,881	450	0.47	0.50
	3404	Rural	2	900	5,538	6,146	470	0.48	0.52
	3405	Rural	2	900	8,134	8,820	680	0.70	0.76
	3406	Rural	2	900	8,231	9,066	700	0.70	0.78
	3407	Rural	2	900	3,767	4,225	320	0.32	0.36

Road #	Station #	Classification	# of Existing Lanes	Total Capacity	Existing AADT	2041 Total AADT	2041 Total PM Peak Hour (Peak Direction)	Existing v/c	2041 v/c
35	3501	Rural	2	900	6,624	7,182	550	0.57	0.61
	3502	Rural	2	900	5,904	6,402	490	0.50	0.54
	3503	Rural	2	900	6,547	8,141	630	0.56	0.70
	3504	Rural	2	900	5,609	6,082	470	0.48	0.52
36	3601	Rural	2	900	788	854	70	0.07	0.08
	3602	Rural	2	900	2,228	2,415	190	0.19	0.21
37	3702	Rural	2	900	3,482	3,775	290	0.30	0.32
	3703	Rural	2	900	6,034	6,542	500	0.51	0.56
38	3802	Rural	2	900	6,611	7,168	550	0.57	0.61
	3803	Rural	2	900	5,148	5,582	430	0.44	0.48
39	3901	Rural	2	900	8,681	9,413	720	0.74	0.80
	3902	Rural	2	900	4,528	4,909	380	0.39	0.42
41	4101	Rural	2	900	4,542	4,925	380	0.39	0.42
42	4201	Rural	2	900	2,298	2,492	190	0.20	0.21
	4202	Rural	2	900	1,446	1,568	120	0.12	0.13
43	4301	Urban	2	700	8,850	9,597	530	0.70	0.76
	4302	Urban	2	700	5,268	5,712	310	0.41	0.44
	4303	Urban	2	700	8,684	9,416	520	0.69	0.74
44	4401	Rural	2	900	6,970	7,699	590	0.60	0.66
	4402	Rural	2	900	7,301	8,058	620	0.62	0.69
45	4501	Rural	2	900	1,079	1,170	90	0.09	0.10
	4502	Rural	2	900	1,062	1,151	90	0.09	0.10
46*	4601	Rural Highway	2	1200	19,381	31,149	1,540	0.80	1.28
	4602	Rural Highway	4	2400	19,393	30,525	1,550	0.41	0.65
	4603	Rural Highway	4	2400	23,560	35,068	1,440	0.40	0.60
49	4901	Rural	2	900	775	841	60	0.07	0.07
	4902	Rural	2	900	432	469	40	0.03	0.04
50	5001	Rural	2	900	1,696	1,940	150	0.14	0.17
	5002	Rural	2	900	1,352	1,567	120	0.11	0.13
	5003	Rural	2	900	668	825	70	0.06	0.08
	5004	Rural	2	900	681	839	70	0.06	0.08
51	5101	Rural	2	900	5,183	5,620	430	0.44	0.48
	5102	Rural	2	900	4,864	5,274	410	0.41	0.46
	5103	Rural	2	900	4,946	5,363	410	0.42	0.46
52	5201	Rural	2	900	3,684	3,994	310	0.31	0.34
	5202	Urban	2	700	5,688	6,168	340	0.44	0.49
85	8501	Rural	2	900	5,893	6,390	490	0.50	0.54
86	8601	Rural	2	900	9,287	10,070	780	0.80	0.87
	8602	Rural	2	900	7,448	8,076	620	0.63	0.69
	8603	Rural	2	900	10,198	11,058	850	0.88	0.94
	8604	Rural	2	900	9,583	10,391	800	0.82	0.89
	8605	Rural	2	900	8,030	8,707	670	0.69	0.74
	8606	Rural	2	900	8,965	9,721	750	0.77	0.83
	8607	Rural	2	900	9,413	10,207	790	0.80	0.88
	8608	Rural	2	900	7,681	8,329	640	0.66	0.71
87	8701	Rural	2	900	8,993	9,751	750	0.77	0.83
	8702	Rural	2	900	2,495	2,706	210	0.21	0.23
109	10901	Rural	2	900	1,801	1,953	150	0.16	0.17
	10902	Rural	2	900	8,006	9,188	710	0.69	0.79
	10903	Rural	2	900	4,540	5,303	410	0.39	0.46
	10904	Rural	2	900	6,438	7,250	560	0.56	0.62
	10905	Rural	2	900	7,929	9,288	710	0.68	0.79
	10906	Rural	2	900	4,932	5,854	450	0.42	0.50
	10907	Rural	2	900	7,900	9,073	700	0.68	0.78
	10908	Rural	2	900	5,626	6,480	500	0.48	0.56
	10909	Rural	2	900	4,506	5,266	410	0.39	0.46
123	12301	Rural	2	900	6,752	7,761	590	0.58	0.66
	12302	Urban	2	700	6,384	6,922	380	0.50	0.54
	12303	Urban	2	700	3,759	4,201	320	0.32	0.36
	12304	Urban	2	700	3,631	4,146	230	0.29	0.33
124	12401	Urban	2	700	5,502	5,966	330	0.43	0.47
	12402	Rural Highway	2	1200	22,444	27,492	2,110	1.44	1.76
	12403	Rural Highway	2	1200	16,171	20,691	1,590	1.04	1.33
	12404	Rural Highway	2	1200	9,797	11,453	880	0.63	0.73
	12405	Rural Highway	2	1200	11,049	12,811	980	0.71	0.82
	12406	Rural Highway	2	1200	9,292	11,190	870	0.60	0.73
	12407	Rural Highway	2	1200	8,406	10,229	790	0.54	0.66
	12408	Urban	2	700	8,768	10,132	550	0.69	0.79
	12409	Urban	2	700	8,768	10,132	550	0.69	0.79
	12410	Urban	2	700	9,392	10,321	570	0.74	0.81
	12411	Rural Highway	2	1200	7,068	7,664	590	0.45	0.49
	12412	Rural Highway	2	1200	25,258	30,544	2,350	1.62	1.96
	12413	Rural Highway	2	1200	15,032	19,455	1,500	0.97	1.25
	12414	Rural Highway	2	1200	10,302	12,109	930	0.66	0.78
	12415	Rural Highway	2	1200	10,743	14,437	1,110	0.69	0.93
125	12501	Rural Highway	2	1200	8,983	10,825	830	0.58	0.69
	12502	Rural Highway	2	1200	20,033	24,878	1,910	1.28	1.59
	12503	Rural	2	900	4,572	4,957	380	0.39	0.42
125	12501	Rural	2	900	4,674	5,068	390	0.40	0.43
	12502	Rural	2	900	4,860	5,270	410	0.41	0.46
	12503	Rural	2	900	4,860	5,270	410	0.41	0.46
					1,281,938	1,562,461	112,810		

*Specific '% DHV' and '% Directional Split' calculated from ATR counts